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A Critical Analysis of the Extent of Achievement of Selected HEIs in CALABARZON with Quality Assurance Standards

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Abstract

Quality is the watchword in higher education today. Higher education institutions (HEIs) worldwide vie for genuine quality education for the reasons of comparability in international standards, mutual recognition of graduates, students' mobility and suitability in the demands of the global market. In the Philippines, the Commission on Higher Education (CHED), the governing body for higher education, continuously monitors and evaluates HEIs and program offerings by safeguarding the quality of education to assure that students acquire the best teachings and learnings. This study was conducted to critically analyze the extent of achievement of selected HEIs in the CALABARZON region with quality assurance standards vis-à-vis the four key result areas as follows: access, capacity building, excellence and innovative and ethical governance.

Keywords: achievement; compliance; critical analysis; quality assurance.

1. Introduction

Quality is a password in the business world and the education arena. Everything in our midst is equated with quality.

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In education per se, it is propelled to suit the needs of the labor market by producing quality graduates with the right competencies. In addition, higher education institutions (HEIs) are encouraged to develop programs that will meet international standards for mutual recognition and to prepare their graduates for a better place in the labor market. With the current challenges confronting higher education where competitiveness takes its course, it is indispensable that higher education institutions should go for quality. Over the years, quality is being pushed in higher education for mutual recognition to international community, eradication of disconnects and meeting the demands of the industries. Quality assurance is the solution to these issues to achieve quality and excellence in higher education.

The Commission on Higher Education (CHED), the regulatory body which oversees the administration and operation of higher education institutions (HEIs), is continuously reorganizing and strategizing to make higher education in the country, competitive and comparable with international standards. It is safeguarding the quality of education to assure that students get what is best as it has a quality assurance system which is enshrined in Sec. 1 Article 16 of the Philippine Constitution, which states that "the State shall protect the right of all citizens to quality education at all levels. In particular, Republic Act 7722, the Higher Education Act of 1994, mandates the Commission on Higher Education to promote and support quality higher education in the country. It also empowers the Commission to monitor and evaluate performance of programs and institutions of higher learning for appropriate incentives as well as imposition of sanctions.

The government has been consistently formulating variety of challenges and demands to all higher education institutions to improve teaching-learning outcomes. The ultimate measure to achieve the end is consistent evaluation in areas or aspects surrounding the educational program. The national government laid down standards to achieve quality and excellence in the education environment. A means to assess if educational institutions exceed the standards and requirements is through accreditation. Meeting the prescribed requirements for government recognition or going beyond the minimum requirements of competencies is a significant index that the goals and programs of the educational institution carry relevance, quality and excellence. The level of quality assurance relates to the degree of performance or exceeding the requirements for quality and excellence of programs in terms of mission, goals and objectives; faculty; curriculum and instruction; students; research, library; physical facilities and learning resources; involvement in extension/community services and administration.

The authors in [5] described quality as the totality of features and characteristics of a service that bear on its ability to satisfy stated or implied needs. Quality in higher education is a multi-dimensional concept which embraces all its functions and activities such as teaching and academic programs, research and scholarship, staffing, students, faculty, equipment, services of the community and the academic environment. Quality takes the form of internal self-evaluation and external reviews conducted by independent expertise. Quality also requires that higher education be characterized by its international dimension, exchange of knowledge, interactive networking, mobility of teachers and students, and international research projects while taking into account the national cultural values and circumstances purpose. The Commission on Higher Education (CHED) has a policy and strategic plan for effective regulation of higher education institutions (HEIs) in the Philippines (Higher Education Act of 1994). It is important therefore, to ensure that these policies and plans are

implemented effectively. It is for this reason that a comprehensive monitoring and evaluation (M & E) tool is put in place with clear indicators to tract progress on all the key areas of the strategic plan. This tool to be effective will have to be enhanced in consultation with the key stakeholders, namely; the State Universities and Colleges (SUCs), Local Universities and Colleges (LUCs), Private Higher Education Institutions (PHEIs), administrators, faculty, students and industries.

The monitoring and evaluation (M & E) tool articulates some of the components of the HEIs and how they should work. It outlines indicators required to calculate each indicator together with sources of data. Furthermore, the document points to how data should flow from various stakeholders to CHED. This is one of the most critical components of the system because without systematic data collection, analysis and compilation of reports, there is no way that monitoring can be done objectively and effectively.

The success of this Monitoring and Evaluation (M & E) is dependent on sub-systems at the institutional level, for without regular reporting with accurate reliable data, the system cannot work. The system also has to draw from other sectors such as stakeholders, parents, among others. Higher education institutions (HEIs) have to invest in monitoring for results, in the education as well as in all other sectors in order to have a fully evidence-based planning and decision making.

The CHED Regional Offices are deputized to conduct institutional monitoring and evaluation of HEIs and program offerings in their respective regions to ensure that the minimum standards are met and quality education is attained. The focus of this study is to critically analyze the level compliance of selected HEIs in CALABARZON with quality assurance standards through the CHED IV-A institutional monitoring and evaluation tool. It seeks to determine whether it has helped indicate achievement of quality tertiary education in CALABARZON.

Region IV-A (CALABARZON) has a total number of 343 HEIS which composed of 5 SUCs with 55 Satellite Campuses, 14 LUCs, and 269 private. Out of 343 HEIs, only 7 are autonomous/deregulated, 3 Centers of Excellence and 4 Centers of Development (CMO Nos. 17 & 20, s. 2016). The figures show that only a few can go beyond the minimum standards set by CHED. Some have backslid after the issuance of government recognition due to small enrollment, financial constraint, poor quality of instruction, sub-standard facilities and low board performance; while others have just settled to meet the minimum requirements. In the board performance, the overall rating of Region IV-A across all board programs for the last five years from 2011 to 2015 is 32% (Philippine Regulation Commission). Looking at this figure, it is more likely to consider that there is a need to improve the quality of tertiary education in the region.

To address these issues, an intensive monitoring and evaluation of institutions and program offerings should be implemented by CHED IV-A to assist HEIs attain quality education and increase their level of compliance with the CHED requirements. The institutional monitoring and evaluation tool of HEIs is a footstool in achieving quality assurance mechanism. This is essential to ascertain the quality in higher education. Therefore, it is plausible that the existing tool should be enhanced to be able to address the call of the times for quality.

Moreover, the Philippine education system is at the crossroad in view of the globalization, thus there is an urgent need to shift to another education discourse in addressing its demands and challenges. To have international mutual recognition of our programs and graduates will be a key to the real quality tertiary level education. Higher Education Institutions' (HEIs) program offerings should be strictly monitored and evaluated to ensure full compliance with the minimum requirements set by CHED vis-a-vis the four functions: instruction, research, community extension and production; these must be aligned with their institutional vision, mission, goals and objectives. Graduates have to be globally competitive, equipped with the right competencies and attitudes, to meet the demands of the world market. Being competent will give them the opportunity to freely study and work abroad. With the advent of ASEAN 2015, HEIs in CALABARZON must be ready for its demands and challenges by being competitive and comparable with international standards. Realizing it will bring to the attainment of quality assurance for higher education in the region.

The forms of public and private higher education institutions have changed dramatically over the past decade. Changes have resulted from both the emergence of private markets and the growth of markets and people through globalization as noted by authors in [3, 6].

This study aimed to conduct a critical analysis of the extent of achievement of selected HEIs in CALABARZON region with quality assurance standards through the existing CHED IV-A institutional monitoring and evaluation tool. Furthermore, results of this study can be of help to higher education institutions, stakeholders, researchers and readers in their pursuit of quality education, to deepen their grit for the achievement and realization of having a good self-analysis assessment in meeting certain assessed criteria for quality control. This also serves as input for the CHED IV-A and school officials to review the existing tool towards its improvement quality measurement.

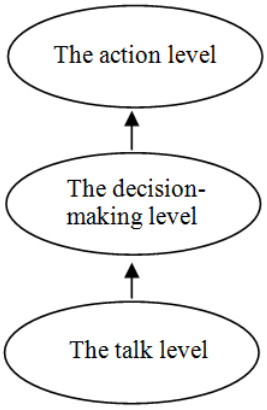

Figure 1: Organizational Theory Perspective

The theoretical framework of this study is based on the Organizational Theory Perspective that suggests possible actions and plans to address complexities brought about by organizational reforms that are likely happening in agencies and institutions. As introduced by the author in [9], there are three concepts to the analysis of organizational reforms, namely; talk level, decision-making level, and action level. The talk level describes the communication of concepts and plans for the organization's development. The decision-making level refers to

the level where elaboration takes place for structures securing the implementation of stipulated policies. Lastly, the action level refers to the actual implementation of policies within the individual university or department. These concepts may be the best approaches in managing issues, policies, and programs in an organization.

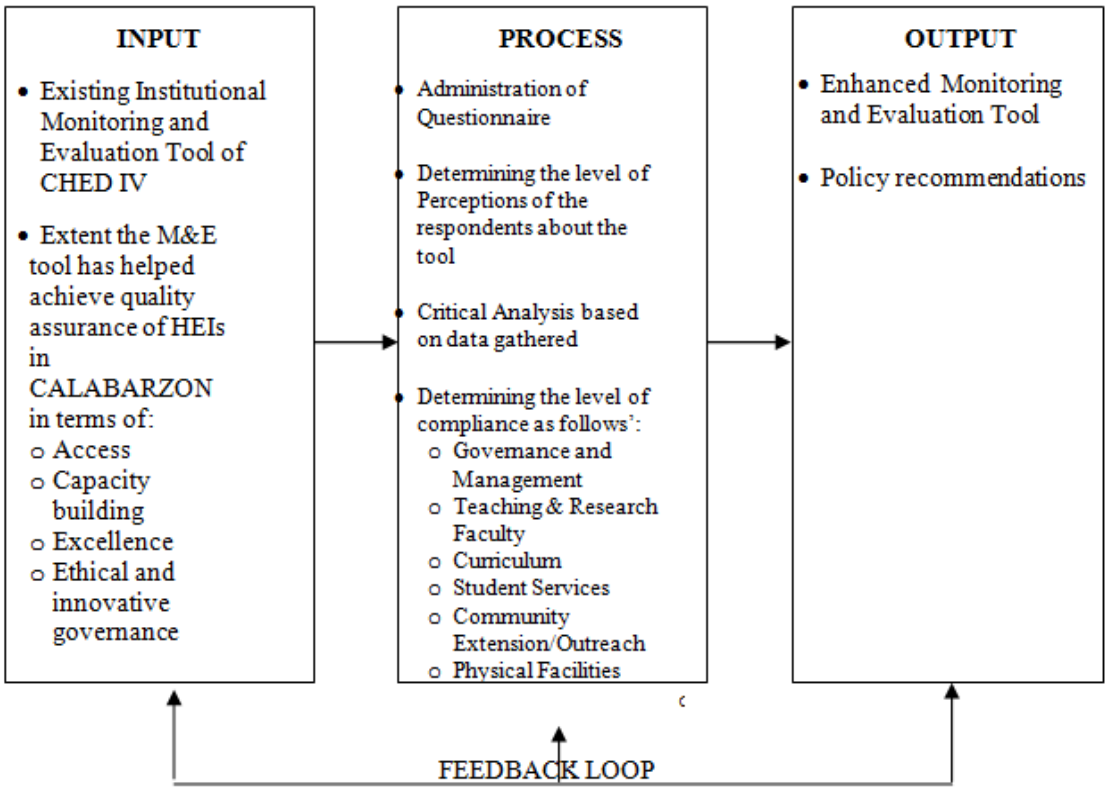

Figure 2: Research Paradigm

The research paradigm (Figure 1) presents what the study is all about. It consists of three parts: namely; input, process, and output. The input consists of the tools used to substantiate the conduct of the study. The process reflects the employment in the generation of data and information.

The output states the enhanced monitoring and evaluation tool for the intensification of quality assurance among HEIs in the CALABARZON region. The feedback loop in this study will solely depend on the directions of the three parts: input, process and output.

The arrows indicate that each component influences the other. The change that occurs in one component will definitely create a greater change to the other component and vice versa; thus, the cycle continues.

2. Materials and Methods

This study utilized the mixed-methods design. Mixed-methods is considered as the third approach by authors in [8]. The mixed-methods sequential explanatory design is explained by authors in [10].

This means collecting and analyzing quantitative and then qualitative data in two consecutive phases within one

study.

Such issues include deciding on the priority on weight given to the quantitative and qualitative data collection and analysis in the study, the sequence of the data collection and analysis, and the stage/stages in the research process at which the quantitative and qualitative data are connected and the results are integrated. The researcher critically evaluated and analyzed the extent of achievement of selected HEIs in the CALABARZON region with quality assurance in terms of access, capacity building, excellence and ethical and innovative governance.

The respondents were chosen based on random sampling model. The researcher chose respondents from 5 SUCs, 4 LUCs, 6 PHEIs, and 5 industries in Region IV with a total number of 155. The basis for choosing the respondent HEIs was the common programs which gained government recognition from CHED IV-A. A questionnaire was used and composed of three (3) parts: 1) demographic characteristics of the respondents; 2) questionnaire proper which covers the level of compliance of the respondent HEIs with minimum CHED requirements where a scale rating of 1-4 was used to determine the level of compliance as per CHED evaluation, specifically from *not at all* to *complied completely*; 3) the extent to which the components of CHED institutional monitoring and evaluation tool have helped achieve quality assurance of HEIs. The scale rating of 1-5 was used in the third and fourth parts, from *not at all* to *very high extent*.

A semi-structured interview was constructed and administered to administrators, faculty, students and industries. Also, an observation was used as a tool in discovering some methods and practices for quality assurance mechanisms. The questionnaire-interview in this study was utilized occasionally in this study.

The validity and reliability of data were verified using Cronbach's alpha (α) wherein 20 individuals composed of several college and university faculty and administrators participated in the pilot testing.

The data gathered in this study were analyzed using the following statistical tools:

1. Frequency and percentage to determine the demographic characteristics of the respondents.
2. Weighted mean to measure the extent the institutional monitoring and evaluation tool components have helped achieve quality assurance of HEIs in the CALABARZON area; this assessed the overall response in each item.
3. Multiple regression to find the linear relationship between an outcome (dependent) variable and several predictors (independent variables). Multiple analysis using SPSS will be employed to determine the simultaneous effect of all the independent variables on the dependent variables.
4. Cronbach's alpha to verify the validity and reliability of data.

3. Results

Salient findings of the study are summarized as follows:

3.1. Extent of the Compliance of HEIs has helped indicate the Achievement of Quality Assurance in CALABARZON

Table 1: Computed Mean, Standard Deviation and Verbal Interpretation on the Extent of the Compliance of HEIs has helped indicate the Achievement of Quality Assurance in CALABARZON

Achievement	SUCs			LUCs			PHEIs		
	Mean	**Sd**	**VI**	**Mean**	**sd**	**VI**	**Mean**	**Sd**	**VI**
1.Improving subject/course offerings (content and sequencing)	4.3438	.51080	VHE	4.5192	.61006	VHE	4.4583	.60369	VHE
2.Attaining desired qualification of faculty	4.2656	.67241	VHE	4.5192	.54198	VHE	4.4167	.59930	VHE
3.Enchancing syllabi and instructional materials	4.2812	.65390	VHE	4.4615	.64051	VHE	4.5556	.60255	VHE
4.Employing/adopting more effective and diverse teaching strategies	4.1719	.72495	HE	4.3654	.59504	VHE	4.4306	.64625	VHE
5.Making fair student performance evaluation	4.2031	.71669	HE	4.4038	.63430	VHE	4.5417	.57989	VHE
6.Providing adequate laboratory facilities	3.9844	.95106	HE	4.0962	.66449	HE	4.3611	.67773	VHE
7.Estabishing linkages with the community	4.2187	.74469	VHE	4.3077	.61160	VHE	4.4306	.62408	VHE
8.Procuring library resources	4.1875	.68718	HE	4.3077	.70122	VHE	4.5278	.62736	VHE
9.Providing health and safety measures	4.0000	.71270	HE	4.2885	.72319	VHE	4.5556	.57870	VHE
10.Improving guidance services	4.0469	.74386	HE	4.1731	.78519	HE	4.5556	.57870	VHE
11.Appointing qualified non-teaching personnel	3.9844	.86359	HE	4.2500	.78902	VHE	4.4861	.60498	VHE
12.Offering programs that match need of industry	4.3906	.70412	VHE	4.3654	.65765	VHE	4.5139	.55647	VHE
13.Receiving awards for the institution	4.1094	.79915	HE	4.0577	.84976	HE	4.3889	.66196	VHE
14.Providing incentives for teaching and non-teaching personnel	4.2698	.78712	VHE	3.9808	.87426	HE	4.2222	.75475	VHE
15.Enhancing research capabilities	4.2656	.67241	HE	3.9423	.84976	HE	4.2222	.71645	VHE
16.Constructing effective faculty assessment tool	4.1719	.67975	HE	4.0577	.72527	HE	4.2500	.80053	VHE
Overall	4.1739	.53026	HE	4.2473	.51307	VHE	4.4300	.45759	VHE

Legend: VHE-Very High Extent, HE-High Extent

As presented in Table 1, the extent of the compliance has helped indicate the achievement of quality assurance of State Universities and Colleges (SUCs) with respect to improving subject/course offerings (content and sequencing), has the highest mean rating of 4.3438. The highest mean rating to achieve the quality assurance and achievement with respect to Attaining desired qualification of faculty, Enhancing syllabi and instructional materials, establishing linkages with the community and providing incentives for teaching and non-teaching personnel have verbal interpretations of "Very High Extent". The extent of help to providing adequate laboratory facilities and appointing qualified non-teaching personnel has the lowest mean rating of 3.9844. The lowest mean rating of help to achieve quality assurance and the rating of other achievement have verbal interpretation of "High Extent". The extent of the compliance has helped indicate the achievement of quality assurance of Local Universities and Colleges (LUCs) with respect to improving subject/course offerings (content and sequencing) and attaining desired qualification of faculty have the highest mean rating of 4.5192. The component with the highest mean rating and the rating of other components such as enhancing syllabi and instructional materials, employing/adopting more effective and diverse teaching strategies, making fair student performance evaluation, procuring library resources, Providing health and safety measures, appointing qualified non-teaching personnel, and offering programs that match need of industry have a verbal interpretation of "High Extent". The component enhancing research capabilities has the lowest mean rating of 3.9423. The component with the lowest mean rating and the ratings of other components such as providing adequate laboratory facilities, receiving awards for the institution, providing incentives for teaching and non-teaching personnel, enhancing research capabilities and constructing effective faculty assessment tool have verbal interpretation of "High Extent". The extent of the compliance has helped indicate the achievement of quality assurance of Private Higher Education Institutions (PHEIs) with respect to providing health and safety measures, and improving guidance services have the highest mean rating of 4.5556. The component with the lowest mean rating to achieve the quality assurance with respect to providing incentives for teaching and non-teaching personnel, and enhancing research capabilities have the lowest mean rating of 4. 2222. The highest and lowest mean rating together with other mean rating has a verbal interpretation of "High Extent".

3.2. Significant Relationship Between the Areas of Compliance Indicators of Quality Assurance

As presented in Table 2, the computed P-values between the significant relationship between the level of compliance of quality with respect to student services, community extension/outreach and physical facilities, and access of the State Universities and Colleges are .010, .050, and .001 respectively, which are lower than 0.05 level of significance. This means that there is a significant relationship between the compliance with respect to student services, community extension/outreach and physical facilities; and access of the State Universities and Colleges. On the computed values of the significant relationship between the level of compliance of State Universities and Colleges with respect to governance and management, teaching and research faculty, and curriculum are .082, .234, and 0.208, respectively. The results indicated that there is no significant relationship between the compliance of quality with respect to governance and management, quality of teaching and research faculty and curriculum and the access of State Universities and Colleges.

Relative to the Local Universities and Colleges (LUCs), the computed p-values between compliance of quality with respect to governance and management, quality of teaching and research faculty, curriculum, student

services, community extension/outreach and physical facilities are all 0.000. The data illustrated that there is a significant relationship between the level of compliance of all aspects of quality; and access of Local Universities and Colleges (LUCs). The findings revealed that compliance of all aspects of quality in Local Universities and Colleges and access are related to each other.

Table 2: Computed Pearson's r and Probability Values on the Significant Relationship Between the Areas of Compliance Indicators of Quality Assurance and Access

Level of Compliance	**A. Access**					
	SUCs		**LUCs**		**PHEIs**	
	Pearson's r	**Sig.**	**Pearson's r**	**Sig.**	**Pearson's r**	**Sig.**
A. Governance & Management	.219	.082	.519	.000*	.417	.000*
B. Quality of Teaching and Research Faculty	.151	.234	.577	.000*	.544	.000*
C. Curriculum	.160	.208	.509	.000*	.485	.000*
D. Student Services	.321	.010*	.554	.000*	.427	.000*
E. Community Extension/Outreach	.246	.050*	.588	.000*	.449	.000*
F. Physical Facilities	.399	.001*	.609	.000*	.500	.000*

*Significant

Relative to the Private Higher Education Institutions (HEIs), the computed p-values between the compliance of quality with respect to governance and management, quality of teaching and research faculty, curriculum, student services, community extension/outreach and physical facilities are all 0.000. The data illustrated that there is a significant relationships between the level of compliance of all aspects and access of Private Higher Education Institutions (PHEIs). The findings showed that compliance of all aspects of quality in Private Higher Education Institutions (PHEIs) and access are related to each other.

As shown in Table 3, the computed p-values between the compliance of quality with respect to governance and management, teaching and research faculty, curriculum, student services, community extensions/outreach and physical facilities, and capacity building of State Universities and Colleges (SUCs) are 0,195, 0.706, 0.416, 0.110, 0.195, and 0.063 which are higher than the 0.05 level of significance. The data illustrated that there is no significant relationship between the level of compliance of all aspects and access of Local Universities and Colleges (LUCs). The findings emphasized that compliance of all aspects of quality and capacity building are related to each other.

Relative to the Local Universities and Colleges (LUCs), the computed p-values between the compliance of all aspects of quality with respect to governance and management, quality of teaching and research faculty,

curriculum, student services, community extensions/outreach and physical facilities; and capacity building is all 0.000 which is lower than 0.05 level of significance. The data illustrated that there is a significant relationship between the level of compliance of all aspects; and access of Local Universities and Colleges (LUCs).

Table 3: Computed Pearson's r and Probability Values on the Significant Relationship Between the Areas of Compliance Indicators of Quality Assurance and Capacity Building

Level of Compliance	B. Capacity Building					
	SUC		LUC		PHEI	
	Pearson's r	Sig.	Pearson's r	Sig.	Pearson's r	Sig.
A. Governance & Management	.164	.195	.473	.000*	.454	.000*
B. Quality of Teaching and Research Faculty	.048	.706	.459	.001*	.478	.000*
C. Curriculum	.103	.416	.531	.000*	.466	.000*
D. Student Services	.202	.110	.530	.000*	.500	.000*
E. Community Extension/Outreach	.164	.195	.520	.000*	.486	.000*
F. Physical Facilities	.234	.063	.551	.000*	.429	.000*

Relative to the Private Higher Education Institutions (PHEIs), the computed p-values of compliance between the compliance of governance and management, quality of teaching and research faculty, curriculum, student services, community extensions/outreach and physical facilities; and capacity building is all 0.000 which is lower than 0.05 level of significance. The data illustrated that there is a significant relationship between the level of compliance of all aspects; and access of Private Higher Education Institutions (PHEIs).

Table 4: Computed Pearson's r and Probability Values on the Significant Relationship Between the Areas of Compliance Indicators of Quality Assurance and Excellence

Level of Compliance	C. Excellence					
	SUCs		LUCs		PHEIs	
	Pearson's r	Sig.	Pearson's r	Sig.	Pearson's r	Sig.
A. Governance & Management	.253	.043	.515	.000*	.490	.000*
B. Quality of Teaching and Research Faculty	.201	.110	.525	.000*	.544	.000*
C. Curriculum	.200	.113	.627	.000*	.463	.000*
D. Student Services	.337	.007*	.556	.000*	.530	.000*
E. Community Extension/Outreach	.259	.039*	.610	.000*	.480	.000*
F. Physical Facilities	.388	.002*	.624	.000*	.459	.000*

As presented in Table 4, the computed P-values between the significant relationship between the level of compliance of quality assurance with respect to student services, community extensions/outreach and physical facilities, and excellence of the State Universities and Colleges (SUCs) are 0.007, 0.039 and 0.002 respectively which is lower than the 0.05 level of significance. This means that there is a significant relationship between the compliance of quality assurance with respect to student services, community extensions/outreach and physical facilities; and the excellence of the State Universities and Colleges (SUCs).

On the computed values of the significant relationship between the level of compliance of quality assurance in State Universities and Colleges (SUCs) with respect to governance and management, quality of teaching and research faculty, and curriculum are 0.082, 0.234, and 0.208 respectively. The result indicated that there is no significant relationship between the compliance with respect to governance and management, quality of teaching and research faculty and curriculum; and excellence of State Universities and Colleges (SUCs).

Relative to the Local Universities and Colleges (LUCs), the computed p-values between the compliance of governance and management, quality of teaching and research faculty, curriculum, student services, community extensions/outreach and physical facilities; excellence is all 0.000. The data illustrated that there is a significant relationship between the level of compliance of all aspects; and excellence of Local Universities Colleges (LUCs).

Relative to the Private Higher Education Institutions (PHEIs), the computed p-values of compliance of governance and management, quality of teaching and research faculty, curriculum, student services, community extensions/outreach and physical facilities are all 0.000. The data illustrated that there is a significant relationship between the level of compliance of all aspects of quality assurance; and excellence of Private Higher Education Institutions (PHEIs).

Table 5: Computed Pearson's r and Probability Values on the Significant Relationship Between the Areas of Compliance Indicators of Quality Assurance and Ethical and Innovative Governance

Level of Compliance	**D. Ethical and Innovative Governance**					
	SUCs		**LUCs**		**PHEIs**	
	Pearson's r	**Sig.**	**Pearson's r**	**Sig.**	**Pearson's r**	**Sig.**
A. Governance & Management	.184	.146	.404	.003*	.414	.000*
B. Quality of Teaching and Research Faculty	.333	.007*	.521	.000*	.511	.000*
C. Curriculum	.376	.002*	.496	.000*	.516	.000*
D. Student Services	.428	.000*	.464	.001*	.547	.000*
E. Community Extension/Outreach	.405	.001*	.521	.000*	.430	.000*
F. Physical Facilities	.407	.001*	.652	.000*	.400	.000*

As presented in Table 5, the computed P-values between the significant relationship between the level of compliance of quality assurance with respect to quality of teaching and research faculty, curriculum, student

services, community extensions/outreach and physical facilities, and ethical and innovative governance of the State Universities and Colleges (SUCs) are 0.007, 0.002, 0.000, 0.001, and .001 respectively, which are lower than 0.05 levels of significance. This means that there is a significant relationship between the compliance with respect to student services, community extensions/outreach and physical facilities and the ethical and innovative governance of the State Universities and Colleges (SUCs). On the computed p- value between the significant relationship between the level of compliance of State Universities and Colleges (SUCs) with respect to governance and management is 0.146 respectively which is higher than the 0.05 level of significance. The result indicated that there is no significant relationship between the compliance of quality assurance with respect to governance and management; and ethical and innovative governance of State Universities and Colleges (SUCs).

Relative to the Local Universities and Colleges (LUCs), the computed p-values between the compliance of governance and management, quality of teaching and research faculty, curriculum, student services, community extensions/outreach and physical facilities; and ethical and innovative governance are 0.003, 0.000, 0.000, 0.001, 0.000, and 0.000 respectively which are lower than 0.05 level of significance. The data illustrated that there is a significant relationship between the level of compliance of all aspects quality assurance and ethical and innovative governance of Local Colleges Universities and Colleges (LUCs).

Relative to the Private Higher Education Institutions (PHEIs), the computed p-values of compliance of governance and management, quality of teaching and research faculty, curriculum, student services, community extensions/outreach and physical facilities; ethical and innovative governance are all 0.000. The data illustrated that there is a significant relationship between the level of compliance of all aspects of quality assurance; and ethical and innovative of Private Higher Education Institutions (PHEIs).

As explained by authors in [7], teachers in the era of rapid change are often required to take up extended roles and responsibilities, including curriculum developer, new teacher mentor, staff development facilitator, action researcher, team leader, decision-maker. As such, teachers are inevitably in need of continuous professional education to update themselves with new knowledge, competence, and attitudes to meet all these challenges.

The author in [11] cited that the teacher is the key element for the success of school education. Policy-makers, teacher education institutions, and schools have implemented numerous initiatives in teacher education and development, aiming to improve teacher performance.

To understand the complex nature of teacher effectiveness and develop an approach to maximizing it, there is a great demand for research on teaching, teachers, teacher education and on the related personnel, organizational, and contextual factors.

According to the report [4], the availability and quality of physical resources is very important input relevant to educational efficiency and quality). In Asia the lack of appropriate laboratories, poor equipment and facilities have affected teaching-learning and research in the countries.

The same report pointed out that teaching and research are important components in HEIs. Professional

development, incentive and rewards and unpreparedness to engage in research are common concerns that institutions undertake to prioritize teaching and research. The report highlighted the analysis of HEIs complex organization through systems approaches which include human and physical resources including academic staff and students and facilities and equipment and work activities of the institution including the nature and process of carrying out teaching, research and extension.

3.3. Enhancement of the M & E Tool As A Result of the Regression Analysis of the Level of Compliance and Achievement

Table 6: Computed Coefficients, t-values, Probability Values and Decision on the Regression Analysis Between the Level of Compliance and Achievement with Respect to Access of State Universities and Colleges Local Universities and Colleges and Private Higher Education Institutions

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Ho	VI
	B	Std. Error	Beta				
(Constant)	1.884	.292		6.446	.000	R	S
A. Governance & Management	.110	.083	.101	1.320	.188	FR	NS
B. Quality of Teaching and Research Faculty	.063	.111	.052	.570	.569	FR	NS
C. Curriculum	-.066	.109	-.059	-.600	.549	FR	NS
D. Student Services	.216	.104	.185	2.081	.039	R	S
E. Community Extension/Outreach	.043	.101	.041	.430	.667	FR	NS
F. Physical Facilities	.347	.083	.378	4.176	.000	R	S

a. Dependent Variable: Access

As presented in Table 6, the computed P-values on the regression analysis between the level of compliance in terms of student services, physical facilities and other factors; and access of State Universities and Colleges (SUCs), Local Universities and Colleges (LUCs) and Private Higher Education Institutions (PHEIs) are all 0.000 which is lower than 0.05 level of significance.

On the other hand, governance and management, quality of teaching and research faculty, curriculum, and community extension/outreach have p-values of 0.188, 0.569, 0.549 and 0.667 respectively which are higher than the 0.05 level of significance.

The result indicated that student services, physical facilities and other factors are significant predictors of access State Universities and Colleges (SUCs), Local Universities and Colleges (LUCs) and Private Higher Education Institutions (PHEIs), while governance and management, quality of teaching and research faculty, curriculum, and community extension/outreach are not.

Thus, there is a need for the three categories of higher education institutions to strengthen the compliance in student services, physical facilities and other factors such as linkages and library facilities in order to attain achievement of access.

Table 7: Computed Coefficients, t-values, Probability Values and Decision on the Regression Analysis Between the Level of Compliance and Achievement with Respect to Capacity Building of State Universities and Colleges Local Universities and Colleges and Private Higher Education Institutions

Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**Ho**	**VI**
	B	**Std. Error**	**Beta**				
(Constant)	2.294	.311		7.367	.000	R	S
A. Governance & Management	.153	.089	.142	1.724	.086	FR	NS
B. Teaching and Research Faculty	-.090	.118	-.075	-.763	.447	FR	NS
C. Curriculum	.032	.116	.029	.277	.782	FR	NS
D. Student Services	.241	.111	.210	2.182	.030	R	S
E. Community Extension/Outreach	.067	.107	.065	.624	.534	FR	NS
F. Physical Facilities	.198	.088	.218	2.238	.026	R	S

a. Dependent Variable: Capacity Building

As revealed in Table 7 the computed P-values on the regression analysis between the level of compliance in terms of student services, physical facilities and other factors; and capacity building of State Universities and Colleges (SUCs), Local Universities and Colleges (LUCs) and Private Higher Education Institutions (PHEIs) are 0.030, 0.026 and 0.000, respectively which is lower than 0.05 level of significance. On the other hand, governance and management, quality of teaching and research faculty, curriculum, and community extension/outreach have p-values of 0.186, 0.447, 0.782 and 0.534 respectively which are higher than the 0.05 level of significance. The results indicated that student services, physical facilities and other factors are significant predictors of capacity building State Universities and Colleges (SUCs), Local Universities and Colleges (LUCs) and Private Higher Education Institutions (PHEIs), while governance and management, quality of teaching and research faculty, curriculum, and community extension/outreach are not. Thus, there is a need for the three categories of higher education institutions to strengthen the compliance in student services, physical facilities and other factors such as linkages and library facilities in order to attain achievement of capacity building.

a. Dependent Variable: Excellence

As reflected in Table 8, the computed P-values on the regression analysis between the level of compliance in terms of student services, physical facilities and other factors; and excellence of State Universities and Colleges (SUCs), Local Universities and Colleges (LUCs) and Private Higher Education Institutions (PHEIs**)** are 0.026, 0.007 and 0.000, respectively which is lower than 0.05 level of significance. On the other hand, governance and management, quality of teaching and research faculty, curriculum, and community extension/outreach have p-values of 0.113, 0.784, 0.877 and 0.820 respectively which are higher than the 0.05 level of significance.

Table 8: Computed Coefficients, t-values, Probability Values and Decision on the Regression Analysis Between the Level of Compliance and Achievement with Respect to Excellence of State Universities and Colleges (SUCs), Local Universities and Colleges (LUCs) and Private Higher Education Institutions (PHEIs)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Ho	VI
	B	Std. Error	Beta				
(Constant)	2.068	.289		7.156	.000	R	S
A. Governance & Management	.131	.082	.127	1.593	.113	FR	NS
B. Quality of Teaching and Research Faculty	.030	.110	.026	.274	.784	FR	NS
W C. Curriculum	.017	.108	.016	.156	.877	FR	NS
D. Student Services	.231	.103	.209	2.251	.026	R	S
E. Community Extension/Outreach	.023	.100	.023	.227	.820	FR	NS
F. Physical Facilities	.226	.082	.259	2.748	.007	R	S

a. Dependent Variable: Ethical and Innovative Governance

As shown in Table 9, the computed P-values on the regression analysis between the level of compliance in terms of student services, physical facilities and other factors; and ethical and innovative governance of State Universities and Colleges (SUCs), Local Universities and Colleges (LUCs) and Private Higher Education Institutions (PHEIs) are 0.020, 0.008 and 0.000, respectively, which is lower than 0.05 level of significance. On the other hand, governance and management, quality of teaching and research faculty, curriculum, and community extension/outreach have p-values of 0.186, 0.447, 0.782 and 0.534, respectively, which are higher than the 0.05 level of significance.

The results indicated that student services, physical facilities and other factors are significant predictors of ethical and innovative of State Universities and Colleges (SUCs), Local Universities and Colleges (LUCs) and Private Higher Education Institutions (PHEIs), while governance and management, quality of teaching and research faculty, curriculum, and community extension/outreach are not. Thus, there is a need for the three categories of higher education institutions (HEIs) to strengthen the compliance in student services, physical

facilities and other factors such as linkages and library facilities in order to attain achievement on ethical and innovative governance.

Table 9: Computed Coefficients, t-values, Probability Values and Decision on the Regression Analysis Between the Level of Compliance and Achievement with Respect to Ethical and Innovative Governance of State Universities and Colleges Local Universities and Colleges and Private Higher Education Institutions

Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**	**Ho**	**VI**
	B	**Std. Error**	**Beta**				
(Constant)	1.755	.301		5.826	.000	R	S
A. Governance & Management	-.038	.086	-.034	-.440	.661	FR	NS
B. Quality of Teaching and Research Faculty	.124	.114	.100	1.085	.279	FR	NS
C. Curriculum	.129	.113	.113	1.142	.255	FR	NS
D. Student Services	.251	.107	.211	2.350	.020	R	S
E.Community Extension/Outreach	.046	.104	.043	.446	.656	FR	NS
F. Physical Facilities	.230	.086	.246	2.691	.008	R	S

4. Conclusion

Quality assurance is almost around the corner as it is being talked about and promoted in various agencies, organizations, companies, offices, programs, and projects. In particular, the Commission on Higher Education, the governing body which oversees the operations of higher education institutions and program offerings in the Philippines, is adamant to ensure quality education in the tertiary level. It formulates policies, standards and guidelines in order that quality be implemented. One measure that the CHED has implemented to promote quality in higher education is the conduct of monitoring and evaluation of higher education institutions to determine whether they are compliant to the policies, standards, and guidelines and meeting the minimum requirements or going beyond.

Based on the findings, the researcher concludes the following:

1. The critical analysis of the extent of compliance of HEIs has helped indicate the achievement of quality assurance in CALABARZON which is based on the four key result areas (KRAs) of CHED as follows: access, capacity building, excellence and innovative and ethical governance. It is supported by the semi-structured interview. Using this method has helped the researcher fully evaluate which among the areas need focus and attention by CHED to make them more relevant and effective.

2. Local Universities and Colleges (LUCs) are inadequate on the aspect of physical facilities of CHED Region IV-A Monitoring and Evaluation Tool.
3. Private Higher Education Institutions (PHEIs) in CALABARZON are responsive to the compliance of CHED IV-A Monitoring and Evaluation Tool.
4. The CHED IV-A Monitoring and Evaluation activity helps in achieving quality assurance of SUCS, LUCs, and PHEIs.
5. There is a significant relationship between the level of compliance of SUCs, LUCs, and PHEIs and achievement with respect to most aspects and extent of achievement of quality assurance except for quality of teaching and research faculty.
6. There are other factors which can predict achievement of quality assurance of SUCs, LUCs, and PHEIs.

5. Recommendations

Higher education institutions (HEIS) are confronted with gaps on how to fully implement the different aspects of quality assurance with respect to access, capacity building, excellence, and ethical and innovative governance. To address the gaps, quality assurance should be institutionalized so that institutions will be pushed to embrace quality culture.

The following recommendations are put forth by the researcher based on the findings of the study:

1. The monitoring and evaluation activity of CHED IV-A will be of great help in assisting SUCs, LUCs, and PHEIs which are not “complied completely”.
2. An enhanced M & E tool should be formulated to capture other indicators not specified in the existing tool.
3. A clear regional Quality Assurance mechanism should be integrated in HEIs such as the European Bologna Declaration, with commitment and policies, to put them in place.
4. The monitoring and evaluation of HEIs in Region IV-A should be intensified to measure its effectiveness and reporting of results should be properly documented and well-kept for the success of the system in higher education.

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